



IL10

1 AAACCACAAGACAGACTT GCAAAAGAAGGCATGCACAGCTCAGCACTGCTCTGTTGCCTGTCCTCCTGACT
 TTTGGTGTCTGTCTGAACGTTTCTTCCGTACGTCTCGAGTCGTGACGAGACAAACGGACCAAGGAGACTGA
 73 GGGGTGAGGGCCAGCCCAGGCCAGGGCACCCAGTCTGAGAACAGCTGCACCCACTTCCCAGGCAACCTGCCTA
 CCCCACCTCCCCGTGGGTCCGGTCCCCGTGGGTCAGACTCTTGTGACGTGGGTGAAGGGTCCGTTGGACGGAT
 146 ACATGCTTCGAGATCTCCGAGATGCCTTCAGCAGACTGAAGACTTCTTCAATGAAGGATCAGCTGGACAAC
 TGTACGAAGCTAGAGGCTACGGAAGTCGTCTCACTTCTGAAAGAAACTTACTTCTAGTCGACCTCTG
 220 TTGTTGTTAAAGGAGTCCTGCTGGAGGACTTAAGGGTACCTGGTGCAGGCTTGTCTGAGATG
 AACACAATTTCCAGGAACGACCTCTGAAATTCCAATGGACCCACGGTCGGAACAGACTCTAC

COX2

1 GTCAGGAACTCCCTCAGCAGGCCCTCCTTCAGCTCACAGCCAGACGCCCTCAGACAGCAAAGCCTACCCCCG
 CAGGTCTTGAGGAGTGCTCGCGGAGGAAGTCGAGGTGTCGGTCTGGGGGAGTGTGCGTTGGATGGGGC
 74 CGCCGCGCCCTGCCCCGGCTGCGATGCTCGCCCGCCCTGCTGCTGTGGCGCGGTCTGGCGCTAGCCATACA
 GCGGCGGGACGGCGGGCACGGCCAGACGGCGGGGACGACACGGGCCAGGACCGCGAGTCGGTATGT
 149 GCAAATCCTGCTGTTCCACCCATGTCAAAACCGAGGTATGATGATGAGTGTGGGATTGACCACTATAAGTGGC
 CGTTAGGAACGACAAGGTGGGTACAGTTTGCTCCACATACATACACACCCCTAAACTGGTCATATTACCGC
 225 ATTGTACCCGGACAGGATTCTATGGAGAAAAGTGTCAACACCGGAATTGGACAAGAATAAAATTATTTC
 TAACATGGGCTGTCTAACATACCTTTGACGAGTTGTGGCTTAAACTGTTCTATTAAATAAG

YY1

1 CGCCGAGACGAGCAGCGGGCGAGCGAGCGCGGGCGGGCGCCACCGAGGGAGGGAGGCGGGAGGCCCCGCCCG
 GCGGCTCTGCTCGTCCGGCTCGCTCGCGCCGCGCCCGTGGCTCCGCTCCCTCGCCCTTCGGGGCGCGCG
 78 CGCCCGCCGCCGCCCTTCCCCGCCGCCCGCCCTCTCCCCCGCCGCCCTCGCCGCCCTCGCCGCCCTCGCC
 GGGGGGGGGGGGGGGGGGGGGGGGGGGGAGAGGGGGGGGGGGGAGCGGGGGGGGGGGGAGGGGGAGACGGAA
 153 CCTTCCCCACGGCCGGCCCTCCCTCGCCGCCGCCGCCAGCCGAGGGAGGCCGAGGCCGCCGTGGCGC
 GGAAGGGGTGCCGGCCGGCGGAGGAGCGGGGGGGGGGTGGCTCCGCTCCGGCTCCGGCGGGGGGGGGGG
 228 GGAGCCCTCAGCCATGCCCTGGCGACACCCTCTACATGCCACGGCTCGAGATGCCGCCGAGATCGTGG
 CCTCGGGGAGTCGGTACCGGAGCCCCTGTGGGAGATGAGCGGTGCCTGCCAGCCTACGGCCGGCTTAGCACC
 305 AGCTGCACGAGATCGAGGTGGAGACCATCCGGTGGAGACCATCGAGACCAACTGGTGGCGAGGAGGAGG
 TCGACGTGCTAGCTCACCTCTGGTAGGCTCTGGTGTGACCAACCGCTCCTCC

IRF2

1 AACTGACGGGCTTCACTTCCATTTCACACACCCCTAGAACACTTATACCTTGCAGAATTGTATTGGTA
 TTGACTGCCGAAAGTAAGGTAAAGTGTGTGGATCGTTGAATATGGAACGCCTTAACATAACCCATCG
 72 GTAAAAAAAGCACACTGAGAGGGCACCATGGCGGTGGAAAGGATGCGCATGCCCGGCGGGCTGGAGGAGCAGAT
 CACTTTTCTGTGACTCTCCCGGTACGGCACCTTCTACCGTACGGGGGACCGACCCCTCGTCTA
 146 AACTCCAACACGATCCGGGCTCAACTGGCTTAACAGGAAAAGAAGATTTTCAAGATCCCGGATGGATGCAT
 TTTGAGGTTGTGCTAGGGGGGGAGTTACCGAATTGTTCTTTCTTCAAAAGTCTAGGGGACCTACGT
 219 GCGGCTAGACATGGGTGGGATGTGGAAAAAGATGCACCACTTTAGAAACCGGGCAATCCATACAGGAA
 CGCCGATCTGTACCCACCCCTACACCTTCTACGTGGTGAAGAAATCTTGGCCCGTTAGGTATGTCCTT
 289 ACCATCAACCAAGGAGTAATAACCTGATCCAAAACATGGAGGCGAATTTCAGATGCCCATGAATTCCTT
 TCCTATTGGTCTCTATTTGGACTAGGGTTTGTACCTTCCGCTAAAGTCTACGGGTACTTAAGGAA
 362 GCCTGATATTGAAGAAGGTCAAGGATAAAAGCATAAAGAAAGGAAATAAGCCTTCAGGGTCTACCGAATGCTG
 CGGACTATAACTCTTCAGTTCTATTTCTGATTTCTTACCGAAGTCCCAGATGGCTACGAC

Fig. 6



IL10

COX2

YY1

IRF2

Figure 6

LEGEND

→ : starting methionine
↔ : complementary sequence for the hammerhead ribozyme
↔ - - → : complementary sequence for the hairpin ribozyme

Boxed sequences: target sequence for the chosen ribozyme

Bold characters: target sequences for hammerhead ribozymes

Bold and **underlined** characters: target sequences for both hammerhead and hairpin ribozymes